

Astronomy TAG 1.3: Explore

What Are the Characteristics of Craters on the Moon?

Name _____

Hour _____ Date _____

Read p. 29.



For each crater diameter, think of a place that is probably that distance from Franklin and record each location as your prediction. Then record the locations your teacher gives you.

Crater	Diameter	Prediction	Local Comparison
Eratosthenes	58 km		
Censorinus	5 km		
Daedalus	93 km		
Glocenius	70 km		
Magelhaens	41 km		



Reflect

1. After carefully observing each picture, compare these craters with those made in the experiments. Use the characteristics of each crater, such as shape, ejecta, and size, to decide whether each is an impact crater or not.

a. Which ones are impact craters?

b. How do you know?

2. Compare the craters in the pictures.

a. How are they the same?

b. How are they different?

3. Most of the lunar craters you have observed are rather large. Think back to the experiment you did and apply what you learned to the formation of craters on the Moon. What can you infer about the size of the objects that collided with the Moon to make these craters?

4. Construct a description of the event that caused each impact crater you analyzed. Include your best guess for the size, speed, and angle of the object that collided with the Moon to form the crater.

Crater	Size of Object	Speed of Object	Angle of Object
Eratosthenes			
Censorinus			
Daedalus			
Goclenius			
Magelhaens			

Craters on the Moon

Read this section on pp. 31-32.

1. How does the angle of impact affect:
 - a. The depth of a crater?

 - b. The shape of a crater?

2. How does the speed of an impact affect:
 - a. The size of a crater?

 - b. The depth of a crater?



What's the Point?

Read the bottom of p. 32. What two factors are the most important in determining the diameter of an impact crater?

